ABSTRACT OF THE DISCLOSURE

The present invention relates to an interconnect for an electrically driven solid electrolyte oxygen separation device comprising a composition of matter represented by the general formula:

$$Ln_xCa_{x'}A_{x''}Mn_yB_{y'}O_{3-\delta}$$

wherein

Ln is selected from the group consisting of La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, and Lu; A is selected from the group consisting of Sr, Ba and Y; B is selected from the group consisting of Cu, Co, Cr, Fe, Ni, Zn, Nb, Zr, V, Ta, Ti, Al, Mg, and Ga; $0.1 \leq x \leq 0.9$; $0.1 \leq x' \leq 0.9$; $0 \leq x'' \leq 0.5$; $0.5 < y < 1.2$; and $0 \leq y' \leq 0.5$; provided that $x + x' + x'' = 1$ and $1.2 > y + y' > 1.0$ wherein δ is a number which renders the composition of matter charge neutral.